Inspection Date:	June 25, 2014
Start:	11:28 AM
Weather:	Rain
Site:	Stone Energy – Tuttle Impoundment Site
Location:	Wetzel County, WV 39.587, -80.78

On June 25, 2014, representatives from the U.S. Environmental Protection Agency (EPA) conducted a Clean Water Act Section 404 inspection at the Tuttle Impoundment along with representatives from the USACE – Huntington District and West Virginia Department of Environmental Protection (WVDEP) Oil and Gas (OOG) and Environmental Enforcement (EE) offices. Representatives from Stone Energy were also present. See sign-in sheet for complete list of attendees.

Background: Site Location and Hydrologic Connectivity

The Tuttle Impoundment Site (Site) consists of a freshwater impoundment and an associated access road, and is operated by Stone Energy Corporation (Stone Energy). The Site is located along West Virginia 20, approximately 1000 feet south of the intersection of West Virginia 20 and Old West Virginia 20, Reader, WV (26167). The Site is located adjacent to Fishing Creek, a USGS "blue-line" stream. From the Site, Fishing Creek flows approximately 12.2 miles to the Ohio River. The nearest RHA Section 10 water that has been formally identified by the U.S Army Corps of Engineers (USACE), Huntington District is Fishing Creek, which is considered navigable 7.4 miles above its mouth to the Ohio River. The distance from the Site to this navigable point is therefore approximately 4.8 miles.

Background: Site History

Construction of the Tuttle impoundment occurred in late 2010 or early 2011. According to Stone Energy, the impoundment was filled using a water withdrawal point on Fishing Creek and is connected to the Conley Impoundment (also inspected on June 25, 2014) via underground piping. When asked, Stone Energy representatives were unsure whether a wetland or stream delineation had been conducted for the Site.

Soils

According to Soil Survey Geographic Database (SSURGO) mapping, more than half of the Site is underlain by Glenford Silt Loam, 3 to 8 percent slopes (GsB). The Glenford component of GsB is found on terraces on alluvial plain remnants. Parent material consists of fine-silty alluvium. While this component does not meet hydric criteria, the Melvin component, which makes up 5 percent of the map unit, is hydric and found on floodplains. The remaining portion of the Site is

mostly underlain by Vandalia silty clay loam, 15 to 25 percent slopes (VaD). Vandalia soil is made up of deep, well drained soils on footslopes and is formed in colluvial material. The disturbed area above the well pad is underlain by Gilpin-Peabody complex, 35 to 70 percent slopes (GpF). This soil is made up of Gilpin (50%) and Peabody (30%) components, which are found on hillslopes. Parent material consists of residuum weathered from shale and siltstone. Neither soil meets hydric criteria.

Wetlands

No wetlands are mapped by the National Wetland Inventory (NWI) in the vicinity of the Site. However, emergent wetland areas were identified upslope and downslope of the gravel access road as well as throughout the investigated site. At a soil pit located just east of the access road, soils were found to be hydric:

0 → 5 inches 10 YR 4/2 with distinct prominent redox features (7.5 YR 5/6) greater than 20%
5 → 14 inches 10 YR 5/4 with concentrations (10 YR 5/8)
Rock at 14 inches

Depth to water table was observed at 10”
Vegetation included: *Carex* spp. (including *Carex vulpinoidea, Carex scoparia*, *Carex lurida*; *Scirpus atrovirens*, and *Juncus effusus**)

Wetland areas were predominantly sedges and rushes; however, a small cattail wetland area was observed south of UNT1

It appears that wetlands were impacted by construction of the impoundment and associated access road. Extent of wetland impacts have not been quantified but may be extensive due to topographic relief, and proximity to Fishing Creek and its mapped flood zone.

Stream(s)

UNT1 (SAMB Stream): UNT1 was a SAMB-mapped sinuous stream that flowed east-southeast through an agricultural field to a forested area before discharging directly into Fishing Creek. No channel was observed upslope (west) of UNT1 in an undisturbed forested patch. However, the stream portion and associated wetland areas west of the forested area adjacent to Fishing Creek had been filled by activities associated with construction of the impoundment and access road. It appears that approximately **650 lf** of UNT 1 had been filled and in its place, a straight ditch had been excavated. The downstream portion of UNT1 was located in the mapped flood zone of Fishing Creek and remained forested.

UNT 2/Wetland (potential, unmapped): UNT was a potential unmapped stream/wetland that flowed/drained northeast through an agricultural field to a forested area before discharging directly into Fishing Creek. The entire potential stream/wetland may have been filled by

construction of the impoundment. An outlet pipe from the impoundment (flowing at the time of the inspection) discharged toward Fishing Creek in this area.